Sand Dune
Protection
and
Management



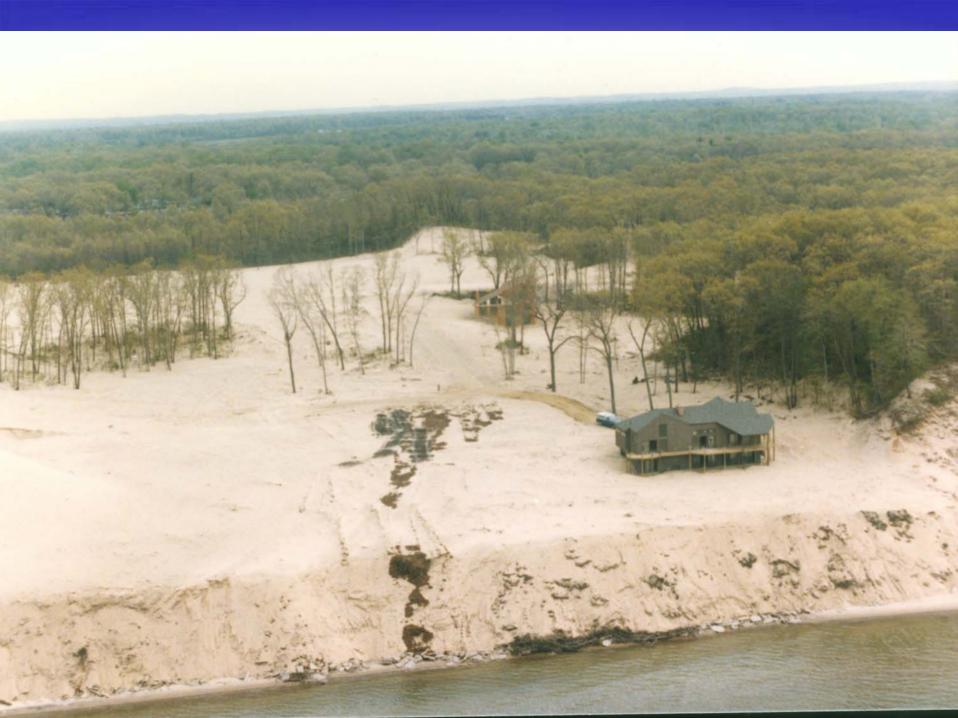


Department of Environmental Quality

Regulatory program

- 1976 Public Act 222, Sand Dune Protection and Management Act was enacted.
- 275,000 acres designated as Sand Dune Areas
- Regulations applied to sand mining









1989 Amendments to Sand Dunes Protection and Management Act

74,000 acres
 designated as Critical
 Dune Areas (CDA)

 1994-codifed as Part 353, Sand Dunes Protection and Management, of the NREPA

55 % Public Areas (1997)



Characteristics of Critical Dune Areas (CDAs)

- Composed of wind deposited sand (eolian)
- Contains dunes at least 20 feet in height
- Presence of exemplary dune-associated plant communities
- CDA boundary could extend no farther than 2 miles inland of a Great Lake

ATLAS OF CRITICAL DUNES



324.35302 Legislative findings.

The legislature finds that:

(a) The critical dune areas of this state are a unique, irreplaceable, and fragile resource that provide significant recreational, economic, scientific, geological, scenic, botanical, educational, agricultural, and ecological benefits to the people of this state and to people from other states and countries who visit this resource.

A globally unique resource.

Examples of Stable Sand Dunes





Destabilized Sand Dunes





324.35302 Legislative findings.

(b) Local units of government should have the opportunity to exercise the primary role in protecting and managing critical dune areas in accordance with this part.

(Presently 6 communities exercise this role out of about 70 communities with CDAs)

324.35302 Legislative findings.

(c) The benefits derived from alteration, industrial, residential, commercial, agricultural, silvicultural, and the recreational use of critical dune areas shall occur only when the protection of the environment and the ecology of the critical dune areas for the benefit of the present and future generations is assured.

Part 353 Regulates:

- A "use" which includes
 - -All construction activities
 - -Vegetation removal
 - -All terrain alteration activities

Without a Special Exception Part 353 Prohibits

- Alteration of slopes over 1 on 3
- Construction lakeward of dune crest
- Lowering of the dune crest
- A use more extensive than required to implement the use

Special Exceptions

- May be issued if a practical difficulty will occur.
- Primary consideration shall be given to assuring that human health and safety are protected and that the determination complies with applicable local zoning, other state laws, and federal law.

Practical Difficulty

- A term utilized in zoning law.
- The Court of Appeals has articulated three factors to consider:
 - 1. Reasonable Use of the Property
 - 2. Substantial Justice Served
 - 3. Relief within the Spirit of the Ordinance

Practical Difficulty cont.

- The Dune Harbor Contested Case Decision recognized these additional factors:
- 1. Whether alternatives exist that minimize or eliminate the impact to the resource
- 2. Whether the problem is self created

Special Exception Reviews

- The staff person assigned to the file presents their findings to a panel of three staff experienced in CDA administration.
- The panel decides whether to approve or deny the special exception.

Challenges

The takings issue

A use more extensive than required to implement the use

Compliance and enforcement

The Takings Issue

Part 353 prohibits a special exception for a building on the first lakeward facing slope of a critical dune area or foredune.

In 2007, the DEQ paid \$2,105,395.41 for the first takings claim under Part 353.

Additional potential takings claims exist.

More extensive than necessary?









Great Lakes Submerged Lands – Part 325

- This act applies to the Great Lakes and Lake St. Clair, but not the connecting waterways.
- Riparian owners own upland property bordering the Great Lakes.
- Riparian owners have riparian rights, including access to navigable waters, dockage, use of water for general purposes (e.g., bathing and domestic use), and title to natural accretions, as certified by the DEQ.

Part 325 An Act to...

- Preserve and protect the interest of the general public in the waters & bottomlands
- Provide for the sale, lease, or exchange of unpatented lands
- Provide for the private or public use of waters of the Great Lakes
- Provide that the public trust will not be impaired by uses, deeds, or leases
- Regulate construction activities

Great Lakes Submerged Lands – Permit Requirements

A state permit under Part 325 is required for:

- Construction or expansion of marinas
- Dredging
- Filling bottomlands
- Shore protection structures (e.g., breakwaters, seawalls, groins)
- Private or commercial docks
- Other structures launch ramps, hoists, etc.

Great Lakes Submerged Lands – Impact Minimization

For each permit application, staff ensures:

- Adverse impacts to the environment, public trust, and riparian interests of adjacent owners are minimal and mitigated to the extent possible
- No feasible and prudent alternatives exist
- Permit shore protection structures only when there is a demonstrated need

Conveyances of Public Trust Bottomlands — Part 325

- Leases for marina purposes
- Public use agreements
- Private use agreements
- Deeds

Marina Lease and Deed



Private Use Agreement



Public Use Agreement



Private Use Agreement Industrial/Commercial use



Great Lakes Issues

- Public trust
- Levels
- Lighthouses
- Intentionally sinking ships
- Living on the Lakes
- Pirates
- Farms



Public Trust & OHWM



RANGE OF WATER LEVELS ON LAKES MICHIGAN & HURON

LAKE LEVEL ABOUT 800 YEARS AGO

CHART DATUM

ABOVE-BELOW

1991

1886 RECORD HIGH LEVEL FOR PERIOD 1880-1982

OHWM

RANGE OF LAKE LEVELS 1900-1987

CHART DATUM 576.8 IGLD

LAKE LEVEL ABOUT

Historic Lighthouses



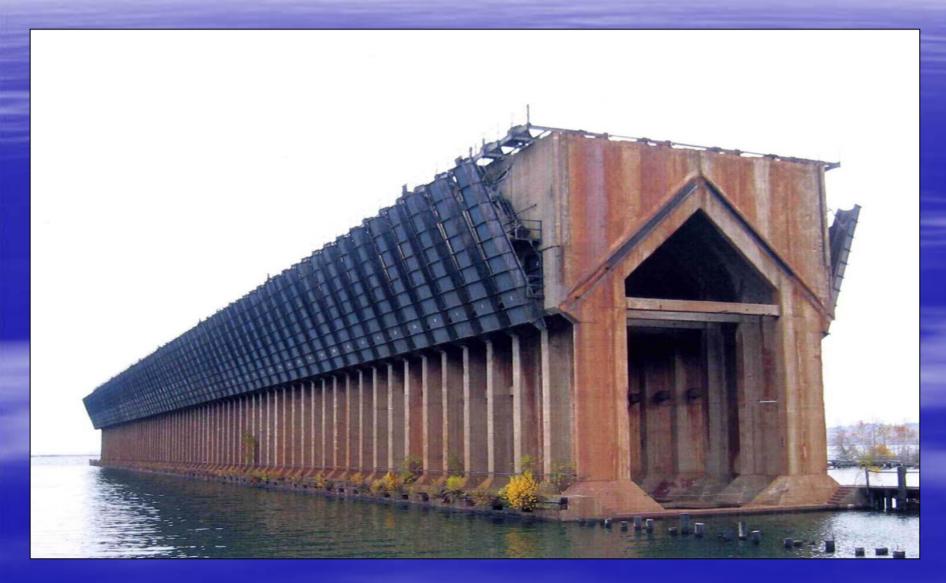
Intentionally sinking ships



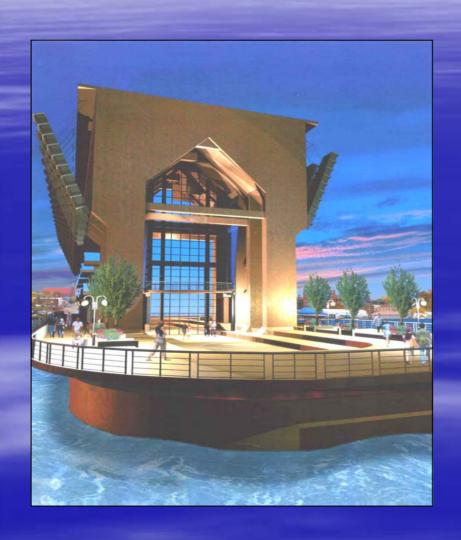
Living on the Water

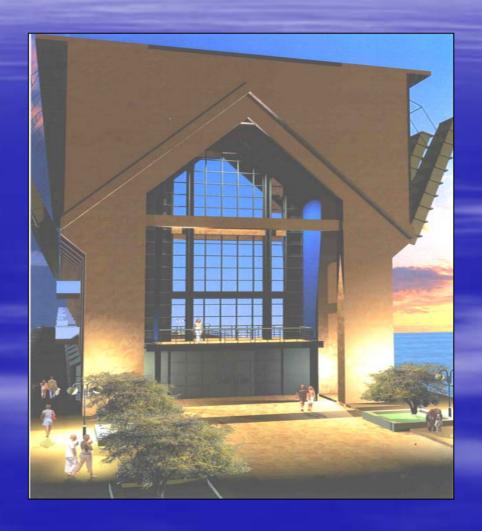


Marquette Ore Dock



Proposed 40 to 50 condominiums, 184 parking spaces with public meeting rooms and public walkways





Pirates



Wind Farms



Muskegon

